The Effect of Innovation on Guest Satisfaction in Hurghada City Resorts, Egypt

Fahd Mohamed Yousry*, Sameh Gamal Saad, Fatma Abdelaal Mohamed

Department of Tourism and Hotel Management, Helwan University, Cairo, Egypt

ABSTRACT

Purpose: The main goal of innovation is to improve guest service and products and also guest satisfaction. Taking into account the four types of innovation recognized by organization for economic cooperation and development, the purpose of this research is to understand how innovation effect on guest satisfaction, specifically in the hospitality industry.

Methodology: The data collection was done through qualitative (interview) and quantitative methods (questionnaire). For the quantitative data processing, the Statistical Package for Social Science software was used through statistical inference methods.

Results: The results show the effect of the four dimensions of innovation on guest satisfaction. These results confirm previous studies on the effect of service, marketing and process innovation on guest satisfaction. However, the results also show the positive relation between guest satisfaction and organizational innovation as well as the relationship between organizational innovation and the other types of innovative research.

Discussions and limitations: The results of this study were based only on one resort. The extension to other cases may strengthen the results. Practical implications: The confirmation that guest satisfaction is associated with innovation, in its four dimensions, can contribute to better decision-making, not only for the resort in the study but also for the sector.

Conclusion: Focusing on understanding the relation between the rate of innovation and its effect on guest satisfaction, the study expands the knowledge about the importance of services innovation on a specific resort in Hurghada City.

Keywords: Innovation; Services; Guest satisfaction; Hospitality industry

INTRODUCTION

Innovation is strongly related to the success of organizations [1]. Regarding innovation in the service sector, the goal is to improve guest service and loyalty, increase productivity, reduce costs and create opportunities in the face of each challenge [2]. Innovation is often seen as a solution and as value creation in organizations. Therefore, use innovation to gain a competitive advantage and achieve excellence through continuous results, determining their long-term success [3]. Innovation can be new for the world, new for the market or new for the organization [4], and is a critical success factor that can make a difference in various organizational contexts.

The positive results of service innovations contribute to guest satisfaction [5]. Nevertheless, Grobelna et al. [6], suggested that future research should focus on exploring the field of innovation in the hospitality industry to improve guest satisfaction and gain competitive advantage in the growing global tourist market. With regard to this suggestion, it seems important to investigate service innovation in particular because of the growing necessity to improve services and enhance their quality through innovation, as guest needs become ever more diverse. Guests need to be impressed and convinced through the services that resort units can offer [7]. The hospitality industry is facing a situation of strong and rapid growth that has contributed to the

creation of jobs and local development, and has an enormous impact on the growth of the economy of each country [8].

Considering that resort organizations are the most competitive type of company in the world according to Martin-Rios et al. [9], we sought to understand how innovation influences the satisfaction of guests in the Steigenberger Resort, in Hurghada city, where tourism contributes greatly to the economy.

Thus, this research intends to explore the concept of innovation in the hospitality industry, identifying the types of innovation, characterizing guests and their level of satisfaction, and also identifying what guest's value in the resort's service.

LITERATURE REVIEW

Innovation concept

Innovation is one of the main factors for a resort's success, being important to achieving competitive advantage [10]. The main goal of innovation is to improve guest service and products to increase guest satisfaction, increase productivity, reduce costs and create opportunities [11,1].

Owing to the importance of innovation to resorts, Croitoru et al. [10], asserts that innovation can be the introduction of a new good or type of good in the market, the introduction of a new production system, the development of a new market or the implementation of a new market structure, sources of materials or products.

The Organization for Economic Co-Operation and Development (OECD) defines innovation as a "new or improved service or product, process, method of marketing and/or organizational method". According to the OECD, product innovation is the introduction of a good or service that is new or significantly improved in terms of its characteristics or its use. Process innovation is related to the implementation of new or significant improvements in the production or delivery methods. Marketing innovation implies implementing new marketing methods and includes significant changes in the product design or packaging, positioning, promotion or pricing. The OECD states that organizational innovation is the implementation of new organizational methods in the practices of the business organization and workplace, or in external relations.

Resorts use innovation in its different forms-product/service, process, market and organizational-to create competitive advantage to achieve better results and define long-term success [12,13]. Therefore, the advantage of innovation is that it generates a value proposition for guests, and benefits those who develop it through the generation of higher revenues [14].

Innovation in the service sector

Services are very particular because of their specific characteristics. These characteristics are intangibility, inseparability, perishability and variability [15]. Because of the immateriality of services, they are produced and consumed simultaneously, and normally imply a direct relationship between the producer and the guest at a specific moment: The

service cannot be saved or stored. Service quality is defined by service performance, and it depends on the different producers, guests or occasions [16].

Service innovation is seen as a sustainable development strategy for many resorts to create value by improving products, services or innovative methods [17,18]. Service innovation is also defined as an addition of new services or a change in the delivery process [19].

Some authors refer to the concept of "new services" to describe innovation through the successful development of new services or products, including innovative and improved activities [20]. Therefore, the creation of new services can be considered as a process that includes diversified activities with the mission of creating a new service or an enhanced one focused on the consumer needs and delivery process of that specific service [21].

The process of service innovation implies the application of knowledge about market needs to the techniques of developing a new idea, concept or invention. It is important to keep the focus on the expectations and needs of the consumer while designing a service [2], this continuous process of design and development of a prototype is essential until it becomes an innovation. Testing and refining the prototype is necessary to obtain feedback and control of the process, to launch a new service [22].

Johnson et al. [23], mention that organizational practices affect the effectiveness and efficiency of the development of new services. These practices have a positive impact on the development of new products and services, influencing their success [24].Service innovation makes companies transform changes into opportunities, which is important for creating value for their stakeholders through new and improved products, processes or business models of services [18,25].

Innovation in the hospitality industry

The excellence of services is an important key to success in the hospitality industry [4]. Owing to the competitive scenario in this industry, it is important for a company to differentiate itself from competitors and attract new guests by creating new and unique experiences [7].

Hospitality industry, as service resorts, also have specific characteristics, particularly in their innovation paths. Their production and consumption happen simultaneously, the consumer and the producer necessarily being in the same space; the elements can be tangible and intangible; transportation and storage are impossible, making it difficult to manage these aspects as the tangible and intangible elements are interconnected; and there is variability, related to the fact that the service offered cannot be repeated in the same way because of the differing conditions and settings [26].

Ottenbacher et al. [27], refer to nine factors that promote the success of service innovation for resort managers: Market selection, strategic management of human resources, employees' training, market opening, empowerment, evaluation based on behaviour, marketing synergies, employees' commitment and intangible qualities.

Organizational innovation is seen as a challenge to this industry because of the transformation of structures needed to manage the organization based on customer-oriented processes [28]. Vukovic et al. [29], state that innovation in the hospitality industry results from the organization's ability to continually transform knowledge and ideas into new products, services, processes and systems, to provide benefits for stakeholders. Thus, the involvement of the members of the organization in the exchange of knowledge and experiences leads to an improvement in the main competences of the organization. Organizational knowledge is a fact that precedes innovation and affects its performance [30,28].

The innovation process in the hospitality industry requires strong commitment from the employees to focus on the guests and apply new knowledge according to the latter's needs [26,31]. In this regard, some operational capability drivers such as physical product, staff attributes and services have a positive relationship with innovative service satisfaction [32]. Most innovations are developed to have an impact on financial performance, to increase revenue and profit [33]. Apart from that, guest satisfaction and employee feedback are important indicators for the success of the hospitality industry [27].

Effect of innovation on guest satisfaction

According to Grobelna et al. [6], it is relevant to study guest satisfaction in the hospitality industry context as it is a resort positioning indicator in the competition for guests. A resort's reputation and image depend on guest satisfaction, which enhances guest loyalty and attracts new guests [34]. It is also important to mention that when guests' expectations are met, they feel satisfied [15].

Trott [35], noticed that guest satisfaction is an important path to guaranteeing the success of new services. Innovation generates guest satisfaction when new products or services are introduced in the market and a company influences consumers' perception of its ability to satisfy their needs [36]. When guests are satisfied, they tend to buy more and their positive feedback attracts new guests easily and at a low cost. Therefore, companies can count on an acceleration of cash flows that will positively affect their value. It is important to invest in innovation because it helps companies generate satisfied guests [37,38].

The results of the study by Weng et al. [20], concerning the relationship between service innovation, value to guest and guest satisfaction show that service innovation has a positive correlation with guest satisfaction. This confirms the fact that guest satisfaction increases when guests recognize that there is more service innovation.

Service innovation is mostly a company strategy to create new products or increase the value of services in response to the guest's demand. Thus, it is necessary to face the challenges presented by consumers, and at this point, the ability to innovate is important to improve interaction with guests through information and communication technologies [39,40].

The study of Yeh et al. [5], based on a case study of tourism factories in Taiwan, mentions the positive effect of service innovation on guest satisfaction. In the rent-a-car business

sector, Tsai et al. [41], observe that service innovation has a significant impact on guest satisfaction.

The study of Chuang et al. [42], which focuses on bed-and-breakfast tourists in Taiwan, and Lemy et al. [34], which is based on Indonesia's resorts, both observe that service innovation affects guest satisfaction and loyalty appreciably.

Yeh et al. [5], emphasize the fact that service innovation not only reflects competitive advantage but also consolidates the long-term relationship with guests, providing them with high-quality products and services [15,43].

As a way of extending this study, it is important to highlight the influence of marketing innovations. With the focus on developing new market needs to produce greater satisfaction, guests have to be persuaded to try new types of products and services. Marketing innovation leads to strategy and having better insight into guests' needs to satisfy them, as well as presenting a good image of the company [44]. Lee et al. [45], mention that great marketing innovations can positively affect guest evaluations, transforming them into satisfaction.

Nkemkiafu et al. [46], contributed to the extension of this study, referring to the fact that the implementation of process innovation allows companies to satisfy their guests and attract new ones. They also mention that it is important for resorts to implement innovative strategies from the product design process to its distribution to satisfy their guests and employees, and achieve growth (Supplementary File Data 1).

METHODOLOGY

Formulation of hypotheses and model of analysis

The main objective of this research is to analyze the relationship between types of innovation and guest satisfaction, using the case study of the Steigenberger Resort, in Hurghada city.

Research questions Q1 and Q2, as mentioned in the previous section, relate to the characteristics of the guests, namely, their age, gender, nationality, reason for visiting and what they value most about the resort service. As mentioned by Trott [47], guests are the main recipients of innovations and, consequently, those who will evaluate them, hence the importance of guest characterization.

Based on previous studies that confirm the effect of innovation on guest satisfaction, this research intends to verify this relationship in the hospitality industry. To decode innovation in services, we studied the four types of innovation defined by the OECD [48], determining which one has the most effect on guest satisfaction. Q3 refers to the effect of service innovations on guest satisfaction based on previous studies, while Q4 and Q5 refer to the effect of process and marketing innovations on guest satisfaction. Lastly, Q6 refers to the effect of organizational innovation on guest satisfaction. The previous research questions lead to the following hypotheses (Supplementary File Data 2).

Research method

The problem addressed by this research is related to guest service, with the aim of identifying the four types of innovation

that affect the degree of satisfaction of resort guests. This is an exploratory study based on research of a case study, focusing on understanding the problems, and analyzing behaviors, attitudes and values. It is research of an inductive and descriptive kind, developing concepts, ideas and understanding from the data provided [18]. The research methodology is mixed, that is, qualitative and quantitative.

Qualitative research was used to collect data through interviews. An interview guide was developed for the interview with the director of the Corporate Development and Innovation Department of the resort. During the interview, it was proposed that a study of the Steigenberger resort should be developed because this resort's minimalist design and innovative concept, and the fact that it was the most recent resort in the group at this moment, made it the most suitable for our research.

Quantitative research aims to identify and present observable data, indicators and trends from a population sample through the study of quantifiable variables [49]. The data collection technique used was the questionnaire survey to obtain information on guests' characteristics, what guest's value about the resort service, and most importantly their degree of satisfaction with the existing types of innovation and with their stay at the resort. The questionnaire for guests aims to understand whether the types of innovation defined by the OECD [48], influence their level of satisfaction. In the construction of the questionnaire, special attention was given to the considerations of Sekaran et al. [49]. Regarding the appropriateness of the language, concepts and structure. The questionnaire survey, resorting to the like scale of 5 points (1–5, where 1 is "strongly disagree" and 5 is "strongly agree"), is intended to obtain the following information:

- Guest characterization.
- The value given by the guest to the resort service.
- The guest's degree of satisfaction with different service innovations found at the resort.
- The guest's degree of satisfaction with different process innovations found at the resort.
- The guest's degree of satisfaction with different marketing innovations found at the resort.
- The guest's degree of satisfaction with different organizational innovations found at the resort.
- The overall degree of satisfaction with the resort.

The questionnaire presented a specific list of service, process, marketing and organizational innovations introduced in the resort. Field work was carried out between April and May 2023. During this period, all resort guests were asked to complete the questionnaire when they checked out.

Data analysis

The guest characterization data were subjected to descriptive analysis, and the data on the degree of guest satisfaction with the four types of innovations were subjected to inferential analysis using the Statistical Package for Social Science (SPSS). For the analysis of the data correlation, the Pearson's correlation coefficient and significance level were used.

The Pearson's correlation coefficient (r) or linear correlation measures the degree of correlation between two quantitative variables and has a value between 1 and 1. When the correlation coefficient approaches 1, there is a positive linear relationship, and when it approaches 1, there is a negative linear relationship. When the coefficient is close to 0, there is no relationship between the variables, and the closer to 1 or 1, the stronger the ratio. The significance level for this study is 95%, and then a p-value of 0.05 is established. For the inferential analysis, the levels of significance considered are:

$P < 0.05$-statistically significant difference.

$P < 0.01^{**}$-very significant statistical difference.

$P < 0.001^{***}$-highly significant statistical difference and

$P > 0.05$-non-significant statistical difference.

RESULTS AND DISCUSSION

The empirical study is divided into three parts. The first contextualizes the case of the resort under study, the second presents the descriptive results related to the characterization of the sample and the third presents and discusses the results obtained by inferential statistics.

The Steigenberger resort, belonging to the deutsche hospitality group, was inaugurated in 2007 in Hurghada City, Egypt. It is situated in a natural and scenic setting, allowing one to enjoy the sea and the mountains at the same time.

The concept of the resort a haven of sophisticated luxury located in the center of Hurghada city, Red sea, in Egypt. And a traditional atmosphere reign inside. There is a peace and privacy pervade this exclusive, five-star resort, located directly on the azure blue red sea shore.

The resort has 343 rooms with a modern and tasteful decor, offering private, furnished balconies with views of the Red sea or the mountains.

Innovation in terms of the concept has been implemented in surprising ways in the resort. The carpets have already been mentioned, but other details include the spa's copper pool representing a honey tank, the rooms' green decor reminiscent of the colour of Red sea and photographs on all the headboards, and the restaurants with walls covered in tubes and meters.

In terms of corporate responsibility, the resort was built and designed with the aim of minimizing its impact on the landscape. In 2018, it won the "Green Star" award, which recognizes and rewards resorts and restaurants around Egypt for their good practices in the areas of environmental and social sustainability.

Steigenberger's guests are divided into segments according to motivations, lifestyle and markets. Thus, the main motivations of guests are nature, sun, sea and sports, health and well-being, and the MICE (Meetings, Incentives, Congress and Exhibitions) industry. Lifestyle includes female travelers, couples, dinks, LGBT tourists and technology lovers. The markets in which it operates are mainly in the UK, Germany, and Russia.

Sample characterization

In the period in which the responses were collected, the resort unit achieved an 80% occupancy rate out of a total of 343 rooms.

Concerning guest characterization of the 205 responses obtained from the questionnaire, 103 were female and 102 were male, with the predominant age of respondents being between 46 and 65 years. Of the sample, 95% defined leisure as their reason for visiting. The majority of the guests were from Russia, Germany and the UK. The average satisfaction with the stay at the resort was 4.44, where 1 would be completely dissatisfied and 5 completely satisfied. In total, 58.5% of the guests were completely satisfied with their stay.

Regarding what guests valued most about the resort service, ranked from 1 to 6, hygiene and comfort, and the involvement and availability of employees came first, followed by the quality of the food, free Wi-Fi and media. What they valued the least were the activities and events taking place at the resort and its social responsibility. Through the questionnaires, it was possible to confirm the study of Ottenbacher et al. [27], in which they state that the attitude and behavior of resort employees is an important factor in the guest's perception of the service and its quality, so one of the factors that guest's value most about the resort service is the employees' involvement and availability.

Hypothesis testing

From data analysis through SPSS, it is possible to verify that the level of guest satisfaction is the highest in product/service innovation (r=0.549), having a moderate but significant positive correlation, which means that the variables are related to each other. It is important to note that the innovative concept, differentiation through new and improved services and the quality of this resort are strongly geared toward guest satisfaction. Thus, it confirms the trends shown in the studies of Weng et al. [20], Yeh et al. [5], Chuang et al. [42], and Lemy et al. [34], regarding the influence of service innovation on guest satisfaction. In addition, we could verify that when the resort meets the guests' needs, it does this most successfully through new services, confirming the study by Edgett [21].

The correlation coefficient between the level of guest satisfaction and organizational innovation (r=0.536) also has a moderate but significant positive correlation. This may demonstrate that the commitment and involvement of resort employees as well as the resort's organizational structure have an impact on guest satisfaction. As Ottenbacher et al. [27], and Zeithaml et al. [40], mention one of the factors that promotes the success of service innovations for resort managers is employee commitment and it directly affects guest satisfaction.

Regarding the correlation coefficient between the level of guest satisfaction and marketing innovation (r=0.476), we can confirm that the latter does potentially affect guest satisfaction. As Lee et al. [45], mentioned great marketing innovations can positively effect on guest evaluations, transforming them into satisfaction. We can also state that events and programs provided by the resort for guests, as well as the sensory marketing used, have an impact on guest satisfaction.

There is also a relationship between the level of guest satisfaction and process innovation (r=0.420), but it is not as strong as the other variables. Even so, it is possible to confirm the study of Nkemkiafu et al. [46], which notes that implementing an innovative process allows companies to satisfy their guests and attract new ones.

The level of significance between the level of guest satisfaction and the four types of innovation is p=0.000, which translates into a significant association between variables. More specifically, H_1 to H_4 have the same p-value (p=0.000), meaning that these hypotheses are supported. Table 1 summarizes the main results.

The results of Table 2 were obtained while analyzing the general data and reveal a moderate positive correlation coefficient between organizational innovation and other types of innovation, which is an important finding in this study. As Johnson et al. [23] said, organizational factors affect efficiency and effectiveness in the development of new services. In a way, organizational innovation supports all other types of innovation, as mentioned by Fraj et al. [30], organizational knowledge is a factor that precedes innovation and affects the performance of the organization. The relationship between these variables implies great involvement of the employees and the resort's organizational structure, as well as the existence of good mechanisms, using technology to develop new services. According to Thwaites [24], some organizational practices that promote success include team work support, the emergence of winning products, support in terms of rewards, risky behaviour, autonomy in handling failures, encouraging employees to submit new ideas and giving them free time to develop those ideas, and making venture capital or other money available for projects.

Table 1: Correlations and significance of variables.

Factors influencing	Customer satisfaction	Product/service innovation	Process innovation	Marketing innovation	Organizational innovation
Level of customer satisfaction with the hotel stay	Pearson's correlation (r) Sig. (bilateral) (p) N	0.549**	0.420**	0.479**	0.536**
		0	0	0	0
		205	205	205	205

Hypotheses	H1: S	H2: S	H3: S	H4: S

Note: **The correlation is significant on 0.01 level (bilateral); S=Supported; NS=Not Supported.

Table 2: Correlations and significance of variables organizational innovation.

Innovation index correlation		Product/service innovation	Process innovation	Marketing innovation
Organizational innovation	Pearson's correlation (r)	0.542**	0.633**	0.623**
		0	0	0
		205	205	205

Note: **The correlation is significant on 0.01 level (bilateral); S=Supported; NS=Not Supported.

It is possible to observe that the four types of innovation defined by the OECD [48], positively affect guest satisfaction; that is, the innovations present when staying at the resort were an important factor for guests' well-being and contentment. The results obtained reinforce the studies of Weng et al. [20], Yeh et al. [5], Chuang et al. [42], and Lemy et al. [34], which affirm that service innovation conclusively has a positive effect on guest satisfaction. Our results also support the study by Lee et al. [45], on the effect of marketing innovation on guest satisfaction, and the study of Nkemkiafu et al. [46], on guest satisfaction through implementation of innovative processes.

The resort uses innovation as a way of solving problems and creating value for its stakeholders, confirming not only the study of Yeh et al. [5], but also that of Ostrom et al, [25]. It was found that 58.5% of the guests were completely satisfied with the stay at the resort. Kotler et al. [15], affirm that when the guest receives what he expects, he is satisfied, so it can be said that the resort meets most of the guest's expectations.

The results found show that the four types of innovation defined by the OECD [48], positively affect guest satisfaction; that is, the innovations present when staying at the resort were an important factor for guests' well-being and contentment. Thus, this research confirms previous studies by Weng et al. [20], Yeh et al. [5], Chuang and Hsu [42], Lemy et al. [34], Lee et al. [45], and Nkemkiafu et al. [46], concerning the effect of service, process, marketing and organizational innovation on guest satisfaction. However, the type of innovation that generates the greatest satisfaction for guests is service innovation. This is because of the fact that the resort is visibly innovative with its concept, as well as with the unique services provided and their quality. The more guests agreed with the mentioned innovations, the more satisfied with the resort they were.

The relationship between organizational innovation and other types of innovation resulted in a positive correlation, which could mean that organizational innovation effects on the efficiency and effectiveness of developing new services, as mentioned by Johnson et al. [23].

CONCLUSION

The hospitality industry's capacity to innovate is necessary to allow it to adapt to the new challenges, conditions and requirements of consumers. By offering specialized and differentiated services, it can obtain a greater number of satisfied guests, which translates into a revenue return and loyalty. The objective of this research was to understand how innovation in the hospitality industry effect on guest satisfaction. We attempted to verify the level of guest satisfaction regarding the resort under study, identifying which type of innovation generates the greatest satisfaction for the guest. Thus, guest satisfaction tends to be positively correlated with innovation, and the implementation of the four types of innovation together is ideal for companies to achieve their goals more efficiently.

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DECLARATIONS

Ethics approval

This article does not contain any studies with human participants performed by any of the authors.

Informed consent

This article does not contain any studies with human participants performed by any of the authors.

Consent for publication

The authors hereby give their consent for the publication of this article.

Competing interests

The authors declare no competing interests.

REFERENCES

1. Calik E, Calisir F, Cetinguc B. A scale development for innovation capability measurement. J Adv Manag Sci. 2017;5(2):69-76.

2. Brooker E, Joppe M. Developing a tourism innovation typology: Leveraging liminal insights. J Travel Res. 2014;53(4):500-508.

3. Lundvall BÅ, Nielsen P. Knowledge management and innovation performance. Int J Manpow. 2007;28(3/4):207-223.

4. Wikhamn W. Innovation, sustainable HRM and customer satisfaction. Int J Hosp Manag. 2019;76:102-110.

5. Yeh TM, Chen SH, Chen TF. The relationships among experiential marketing, service innovation, and customer satisfaction-A case study of tourism factories in Taiwan. Sustain Sci. 2019;11(4):1041.

6. Grobelna A, Marciszewska B. Measurement of service quality in the hotel sector: The case of Northern Poland. J Hosp Mark Manag. 2013;22(3):313-32.

7. Hu ML, Horng JS, Sun YH. Hospitality teams: Knowledge sharing and service innovation performance. Tour Manag. 2009;30(1):41-50.

8. Rodriguez I, Williams AM, Hall CM. Tourism innovation policy: Implementation and outcomes. Ann Tour Res. 2014;49:76-93.

9. Martín-Rios C, Ciobanu T. Hospitality innovation strategies: An analysis of success factors and challenges. Tour Manag. 2019;70:218-229.

10. Croitoru A. Schumpeter, JA. The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle. J Comp Res Anthropol Soc. 2012;3(2):137-148.

11. Lundvall BÅ, Nielsen P. Knowledge management and innovation performance. Int J Manpow. 2007;28(3/4):207-223.

12. Christensen CM. The innovator's dilemma: When new technologies cause great firms to fail. Harv Bus Rev. 2013.

13. Shaqrah AA. A conceptual model of customer innovation centric. Int J Cust Relatsh Mark Manag. 2010;1(2):57-71.

14. von Hippel E. Democratizing innovation: The evolving phenomenon of user innovation. Tour Manag. 2005;55:63-78.

15. Kotler P. Marketing management: A south Asian perspective. Pearson Education India, 2009.

16. Gallouj F, Weinstein O. Innovation in services. Res Policy. 1997;26(4-5):537-56.

17. Horng JS, Wang CJ, Liu CH, Chou SF, Tsai CY. The role of sustainable service innovation in crafting the vision of the hospitality industry. J Environ Sustain. 2016;8(3):223.

18. Yin RK. Case study research: Design and methods. Sage. 2009.

19. Menor LJ, Roth AV. New service development competence in retail banking: Construct development and measurement validation. J Oper Manag. 2007;25(4):825-846.

20. Weng MH, Ha JL, Wang YC, Tsai CL. A study of the relationship among service innovation, customer value and customer satisfaction: An empirical study of the hotel industry in Taiwan. Int J Organ Innov. 2012;4(3):98-112.

21. Edgett S. The traits of successful new service development. J Serv Mark. 1994;8(3):40-49.

22. Voss CA. Measurement of innovation and design performance in services. Des Manage J 1992;3(1):40-46.

23. Johnson SP, Menor LJ, Roth AV, Chase RB. A critical evaluation of the new services development process: Integrating service innovation and service design. New service development, creating memorable experiences. 2000.

24. Thwaites D. Organizational influences on the new product development process in financial services. J Prod Innov Manage. 1992;9(4):303-313.

25. Ostrom AL, Bitner MJ, Brown SW, Burkhard KA, Goul M, Smith-Daniels V, et al. Moving forward and making a difference: Research priorities for the science of service. J Serv Res. 2010;13(1):4-36.

26. Souto JE. Business model innovation and business concept innovation as the context of incremental innovation and radical innovation. Tour Manag. 2015;51:142-155.

27. Ottenbacher M, Gnoth J. How to develop successful hospitality innovation. Cornell Hotel Restaur Adm Q. 2005;46(2):205-222.

28. Mostafa RB, Hefny LI. Exploring the mediating and moderating role of services marketing strategy and safety and security measures in the tourism industry. Int J Cust Relatsh Mark Manag. 2016;7(1):1-26.

29. Vuković AJ, Gagić S, Terzić A, Petrović MD, Radovanović M. The impact of organisational learning on innovation. J East Eur Manag. 2018;23(4):673-692.

30. Fraj E, Matute J, Melero I. Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. Tour Manag. 2015;46:30-42.

31. Orfila-Sintes F, Mattsson J. Innovation behavior in the hotel industry. Omega. 2009;37(2):380-394.

32. Subramanian N, Gunasekaran A, Gao Y. Innovative service satisfaction and customer promotion behaviour in the Chinese budget hotel: An empirical study. Int J Prod Econ. 2016;171:201-210.

33. Griffin A, Page AL. An interim report on measuring product development success and failure. J Prod Innov Manag. 1993;10(4):291-308.

34. Lemy D, Goh E, Ferry J. Moving out of the silo: How service quality innovations can develop customer loyalty in Indonesia's hotels. J Vacat Mark.2019;25(4):462-479.

35. Trott P. Innovation management and new product development. Pearson education, 2008.

36. Luo X, Bhattacharya CB. Corporate social responsibility, customer satisfaction, and market value. J Mark. 2006;70(4):1-8.

37. Gruca TS, Rego LL. Customer satisfaction, cash flow, and shareholder value. J Mark. 2005;69(3):115-130.

38. Grewal R, Chandrashekaran M, Citrin AV. Customer satisfaction heterogeneity and shareholder value. J Mark Res. 2010;47(4):612-26.

39. Danneels E, Kleinschmidtb EJ. Product innovativeness from the firm's perspective: Its dimensions and their relation with project selection and performance. J Prod Innov Manage. 2001;18(6):357-373.

40. Zeithaml VA, Bitner MJ, Gremler DD. Services marketing: Integrating customer focus across the firm. McGraw-Hill. 2018.

41. Tsai MT, Chuang LM, Chen CC, Chao HM. The research on the relationship among service innovation, normative evaluation, service quality and customer satisfaction-A case study of Taiwan car-rental carrier. J Quality. 2010;17(3):207-27.

42. Chuang KW, Hsu CC. A study of the relationships among service innovation, service quality and customer satisfaction-The case of bed and breakfasts visitors in Ken-Ting Area. NCYU Phys Educ Health Recreation J. 2012;11:192-199.

43. Drejer I. Identifying innovation in surveys of services: A Schumpeterian perspective. Res Policy. 2004;33(3):551-562.

44. Zuñiga-Collazos A, Castillo-Palacio M. Impact of image and satisfaction on marketing innovation. J Technol Manag Innov. 2016;11(2):70-75.

45. Lee CY, Tsao CH, Chang WC. The relationship between attitude toward using and customer satisfaction with mobile application services: An empirical study from the life insurance industry. J Enterp Inf Manag. 2015;28(5):680-697.

46. Nkemkiafu AG, Asah NP, Felix N. Strategic process innovation practices on customer satisfaction and market share. J Mark Develop Comp. 2019;13(2).

47. Trott P. Innovation management and new product development. Pearson education, 2008.

48. Oecd E. Oslo manual: Guidelines for collecting and interpreting innovation data. Paris. 2005;46:1-34.

49. Sekaran U, Bougie R. Research methods for business: A skill building approach. john wiley & sons; 2016.